

### ABSTRACT OF THE DISCLOSURE

A system and method for monitoring rod moving coils in nuclear power system. The system ensures that these coils are each functioning properly, and thus prevent movement of the other coils when a dysfunctional coil is detected. The method for accomplishing this monitoring is to provide constant power to all of the coils and to measure the negatively induced EMF from this induction. This level of EMF is then compared to a standard EMF. When the EMF level is below a threshold limit, which may be either preset or calculated from a variety of other variables, a signal is sent to an alarm.